

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An illuminator including a pair of an ultraviolet light-emitting discharge tube and a white visible light-emitting discharge tube that are alternately and periodically placed in a lighted state and an unlighted state, such that a state of illumination using only one of said ultraviolet light-emitting discharge tube and said white visible light-emitting discharge tube is realized in at least part of a time domain during a period, the illuminator comprising:

a plurality of pairs of light sources for ultraviolet light and white visible light.

a hot-cathode tube used for at least one of said ultraviolet light-emitting discharge tube and said white visible light-emitting discharge tube, said hot-cathode tube being arranged in a state where a heating power supply for heating filaments, and an illuminating power supply for enabling motion of thermoelectrons within said hot-cathode tube and at a same time periodic repetition of the lighted state and unlighted state, are capable of executing and interrupting application of voltage, independently of each other, and

a computer which controls selection of a pair of light

sources and periodic application of voltages from power supplies to the selected pair of light sources.

2. (Original) The illuminator of claim 1, wherein a cold-cathode tube is employed as a discharge tube having no heating power supply arranged therein.

3. (Original) The illuminator of claim 2, wherein said cold-cathode tube is used as a backlight.

4. (Canceled)